MULTIMEDIA UNIVERSITY

STUDENT IDENTIFICATION NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2016/2017

BBF2134 – FINANCIAL MARKETS AND INSTITUTIONS

(All sections / Groups)

19 OCTOBER 2016
9.00 a.m - 11.00 a.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This Question paper consists of **3** pages with **4** Questions only.
2. PART A: Answer **ALL** questions (**COMPULSORY**).
   PART B: Attempt **ANY TWO** questions only.
   The distribution of the marks for each question is given.
3. Please write all your answers in the Answer Booklet provided.

PART A: Answer ALL questions (COMPULSORY)

QUESTION 1

CASE STUDY

Amar's manager has asked him to examine the interest-rate risk of their bank relative to their direct competition. Management is concerned that interest rates will fall by the end of the year and wants to see what would happen to the relative profitability of the firm if the decline actually occurs.

Bank Balance Sheet

	Your Firm		Competition	
	Amount ($millions)	Duration (years)	Amount ($millions)	Duration (years)
Assets				
Reserves and cash items	3	0.0	4	0.0
Securities				
Less than 1 year	4	0.6	5	0.3
1-2 years	3	1.6	7	1.2
Greater than 2 years	7	5.0	9	4.0
Residential mortgages				
Variable-rate	9	0.4	21	0.9
Fixed-rate (30 years)	15	5.5	17	4.4
Commerical loans				
Less than 1 year	13	0.9	30	0.5
1-2 years	31	1.8	22	1.4
Greater than 2 years	55	6.0	30	5.4
Physical capital	10	0.0	25	0.0
Liabilities				
Checkable deposits	10	1.0	14	1.0
Money market deposit accounts	5	0.5	9	0.5
Savings deposits	12	1.0	16	1.0
CDs				
Variable-rate	6	0.4	12	0.6
Less than 1 year	19	0.3	14	0.5
1-2 years	8	1.1	10	1.8
Greater than 2 years	15	2.9	10	2.2
Fed funds	10	0.0	14	0.0
Borrowings				
Less than 1 year	12	0.4	18	0.7
1-2 years	9	1.2	12	1.8
Greater than 2 years	39	2.9	31	3.8

Interest-rate risk depends on each bank's relative position in interest-sensitive assets and liabilities. Amar begin the analysis by collecting the information and estimates.

Based on the above, in order to prepare the presentation for his manager, Amar must anticipate and answer the following questions. (Assuming that 20% of fixed rate residential mortgages are repaid within 1 year, checkable deposit is 10% and savings deposit is 20%):

A. What is the total of interest-rate-sensitive assets for:

i) Amar's bank? (5 Marks)

ii) Competing bank? (5 Marks)

Continued...

B. What is the total of interest-rate-sensitive liabilities for:
   i) Amar's bank? (5 Marks)
   ii) Competing bank? (5 Marks)

C. What is the duration gap for:
   i) Amar's bank? (7.5 Marks)
   ii) Competing bank? (7.5 Marks)

D. Using a supply-and-demand for bonds framework, explain what is the effect on interest rates when the riskiness of bond relative to other assets rises. Draw the appropriate supply-and-demand diagrams. (15 Marks)

(Total: 50 Marks)

PART B: Answer **ANY TWO** questions **only.**

QUESTION 1

A. What are development finance institutions (DFIs)? Describe their functions and specialities. (10 Marks)

B. What is the price of perpetuity that has coupon of $80/year and a yield to maturity of 3.5%? If the yield to maturity doubles, what will happen to its price? (5 marks)

C. How much would Emir pay for a Treasury bill that matures in 182 days and pays $10,000 if you require a 1.8% discount rate? (10 marks)

(Total: 25 marks)

QUESTION 2

A. For the upcoming week, Abrahim National Bank plans to issue $25 million in mortgages and purchase $100 million 31-day T-bills. New deposits of $35 million are expected, and other sources will generate $15 million in cash. What is Abrahim's estimate of funds needed? (5 Marks)

B. Ariann Inc. has an outstanding convertible bond. The bond can be converted into 20 shares of common equity (currently trading at $52/share). The bond has 5 years of remaining maturity, a $1,000 par value, and a 6% annual coupon. Ariann's straight debt is currently trading to yield 5%. What is the minimum price of the bond? (10 Marks)

C. Briefly explain the differences between of the following markets:
   i) Money market (5 Marks)
   ii) Capital market (5 Marks)

(Total: 25 marks)

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QUESTION 3

A. Consider the following three valuations for a stock with certain dividends but different perceived risk:

Investor	Discount Rate	Stock Price
Arian	16%	$17.84
Harry	8%	$55.64
Adam	13%	$25.24

i. Generally, how the market will set the security price? (5 Marks)

ii. Referring to the table above, who will determine the market price of stocks and why? (5 Marks)

B. You are in the market for a used scooter (motorcycle). At a used scooter lot, you known that the book value for the scooters you are looking at is between $30,000 and $34,000. If you believe the dealer knows as much about the scooter as you, how much are you willing to pay? Why? Assume that you only care about the expected value of the scooter you buy and that the scooter values are symmetrically distributed.

(10 Marks)

C. Explain in details the present structure of the Malaysian financial system.

(5 Marks)
(Total: 25 marks)

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